

ORIGINAL

EX PARTE OR LATE FILED

WILKINSON, BARKER, KNAUER & QUINN

DOCKET FILE COPY ORIGINAL

TELECOPIER  
\_\_\_\_\_  
(202) 783-5851  
(202) 833-2360

LAW OFFICES  
1735 NEW YORK AVENUE, N.W.  
WASHINGTON, D. C. 20006-5209  
\_\_\_\_\_  
(202) 783-4141

GERMAN OFFICE  
GOETHESTRASSE 23  
60313 FRANKFURT A.M., GERMANY  
011-49-69-20876  
011-49-69-297-8453 (TELECOPIER)

May 14, 1997

William F. Caton  
Secretary  
Federal Communications Commission  
1919 M Street, N.W.  
Washington, DC 20554

RECEIVED  
MAY 14 1997

Federal Communications Commission  
Office of Secretary

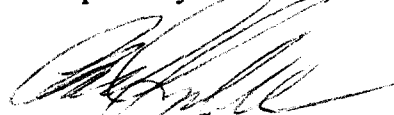
Re: *Implementation of Section 207 of the Telecommunications Act of 1996:  
Restrictions on Over-the-Air Reception Devices: Television Broadcast and  
Multichannel Multipoint Distribution Service – CS Docket No 96-83  
NOTICE OF ORAL EX PARTE COMMUNICATION*

Dear Mr. Caton:

I am writing to notify the Commission that yesterday afternoon Andrew Kreig, Acting President of the Wireless Cable Association International, Inc. ("WCA"), David B. Hattis, technical consultant to WCA, the undersigned counsel to WCA, and William J. Andrie, Jr., counsel to BellSouth Corporation ("BellSouth") met with Meredith Jones, Chief of the Cable Services Bureau, and William Johnson, Rick Chessen, JoAnn Lucanik and Darryl Cooper of the Cable Services Bureau staff to discuss the issues raised by WCA and BellSouth in their pending petitions for reconsideration in the above-referenced proceeding. WCA and BellSouth advised the staff of the recent decision by a committee of the Building Officials & Code Administrators International, Inc. ("BOCA") to recommend against adoption of a proposed amendment to the BOCA model building code that WCA and BellSouth had jointly submitted, and discussed the implications of that decision on this proceeding, as well as other matter addressed in the pending petitions for reconsideration of WCA and BellSouth. Copies of the proposed amendment, along with the BOCA committee's rationale for rejecting the proposal, were provided to the staff and are annexed for inclusion in the record.

Please contact the undersigned should you have any questions regarding this notice.

Respectfully submitted,



Paul J. Sinderbrand

Enclosure  
cc: Meredith Jones

No. of Copies rec'd  
List ABCDE

011

**William F. Caton**

**May 14, 1997**

**Page 2**

**William Johnson**

**Rick Chessen**

**JoAnn Lucanik**

**Darryl Cooper**

**Code Change No: B163-97****Section:** 3109.3**Related Changes:** None**Committee Recommendation:** \_\_\_\_\_**Conference Action:** \_\_\_\_\_**Proponent:** David B. Hattis**Representing:** Building Technology, Inc.**Change to read as shown:**

**3109.3 Dish antennas:** An antenna intended for satellite communication consisting of a radiation element which transmits or receives radiation signals generated as electrical, light or sound energy, and supported by a structure with or without a reflective component to the radiating dish, usually in a circular shape with a parabolic curve design constructed of a solid or open mesh surface, shall be known as a dish antenna.

**SUPPORTING STATEMENT:** This revision is related to a proposed code change to add a new Section 3109.4 submitted by Richard Alston for the Wireless Cable Association. This revision will clarify the difference between antennas regulated by 3109.3, and by 3109.4 if the latter change is adopted. The section on dish antennas first entered the code in the 1988 Supplement to the 1987 code, and it was intended to regulate antennas used for satellite communication. The supporting statement at the time spoke of "satellite antennae." The 1993 Commentary on Section 3109.3 opens with the statement "Satellite dishes are heavier than conventional antennas...". The change is necessary because new types of antennas are being used in the telecommunications industry, and the scope of a specific targeted regulation should be clearly defined.

**STAFF COMMENT:** The proposed change would narrow the scope of the provisions but there is no indication of the impact of the change in the supporting statement. The types and characteristics of antennae that would no longer be covered should be described with an indication of why they should not be subject to those requirements. What are the differences, if any, between antennas for satellite communication and the "new" types as it relates to the code's requirements?

**Code Change No: B164-97****Section:** 3109.4 (New)**Related Changes:** None**Committee Recommendation:** \_\_\_\_\_**Conference Action:** \_\_\_\_\_**Proponent:** Richard Alston**Representing:** Wireless Cable Association International**Add new text as shown:**

**3109.4 Wireless cable antennas:** An antenna that is installed at a customer's premises for a wireless cable system shall be known as a wireless cable antenna.

**3109.4.1 Permits:** A permit is not required for the following categories of wireless cable antenna installations:

1. Any wireless cable antenna that is attached directly to any building surface.
2. Any wireless cable antenna that is erected and maintained on a mast not more than twelve feet (3658 mm) in length.
3. Any single or double finned tube antenna or any open mesh antenna (71% or more open in the surface of the antenna) of less than 3 feet and 4 inches (1,017 mm) in any projected dimension erected and maintained by a wireless cable operator on a mast not more than 36 feet (10,974 mm) in length.
4. Any wireless cable antenna of any shape, size or design erected and maintained by a wireless cable operator if the code official has previously approved the installation designs and procedures employed by the wireless cable operator for such antennas as consistent with Section 3109.4.4 and the wireless cable operator certifies that all such antennas will be erected in conformity with the previously approved installation designs and procedures.

**3109.4.2 Location:** Guy wires or other accessories shall not cross or encroach upon any street or other public space, or over any electric power lines, or encroach upon any other privately owned property without written consent of the owner. Subject to compliance with the foregoing sentence and with Section 3109.4.4, no restriction is imposed upon the location of any wireless cable antenna and supporting mast.

**3109.4.3 Construction:** All connections to the roof structure shall be properly flashed to maintain water tightness. The design and materials of construction shall

**B164-97 continued**

comply with the requirements of Section 3108.3 for character, quality and minimum dimension.

**3109.4.4 Structural provision: Wireless cable antennas and their connections to any building shall comply with the structural provisions of Sections 1608.0, 1609.0 and 3108.4.**

**SUPPORTING STATEMENT:** The intent of this addition is to specify new requirements applicable to antennas employed by the wireless cable industry. Proposed Section 3109.4 defines wireless cable antennas. Section 3109.4.1 and 3109.4.2 establish the applicable new requirements. Section 3109.4.3 repeats applicable portions of 3109.2. Section 3109.4.4 repeats applicable portions of 3109.3.2. These proposed revisions are related to a separately proposed revision to Section 3109.3, which is intended to clarify that Section 3109.3 is intended to regulate satellite antennas.

The wireless cable industry is an emerging industry that has recently been recognized by the US Congress and the Federal Communications Commission (FCC) as an important potential competitor with cable television (which does not require an antenna) and direct satellite communication (which requires a dish antenna regulated by Section 3109.3). Existing Section 3109.1, which has been in the code since 1950, exempts from a permit requirement antennas installed on masts up to 12 feet in length. Although Section 3109.1 was initially intended for owner-installed amateur radio and local broadcast television antennas, it is currently applicable also to wireless cable antennas.

The provision of quality wireless cable service requires that a wireless cable antenna be carefully installed by the operator to assure that it is mounted in a safe and stable fashion. For this reason, wireless cable antennas are installed by professional installer who strictly adhere to industry standards. Many wireless cable antennas are mounted directly on the building or on roof-top masts that do not extend more than 12 feet in length, and therefore no permits are required prior to installation pursuant to existing Section 3109.1. However, because of the technical characteristics of the frequencies licensed by the FCC for wireless cable use, there must be an unobstructed direct line from the transmitting antenna to each reception antenna. As a result, it is sometimes necessary for a wireless cable reception antenna to be mounted on a mast that extends more than twelve feet in length.

Obtaining a building permit for a wireless cable antenna installation on a mast that extends more than twelve feet will impose additional cost and a significant time burden on the process of installing wireless cable antennas and delivering wireless cable service, substantially will impair the ability of the wireless cable industry to provide service to subscribers and compete on a level playing field with cable and direct satellite services. The U.S. Congress has recognized that building codes, zoning and other local laws were unnecessarily frustrating the emergence of wireless cable. To remedy that situation, Congress mandated in the Telecommunications Act of 1996 that the FCC adopt rules preempting state and local statutes and regulations, legal requirements, restrictive covenants or encumbrances that impair the reception of wireless cable service. Among other things, the FCC has since preempted all building code provisions that impair the installation, use or maintenance of wireless cable antennas, unless those provisions are both non-discriminatory and no more burdensome than necessary to achieve the safety-related purpose underlying them. Existing Section 3109 presently does not comply in all respects with the FCC's rules as Section 3109 relates to wireless cable antennas. The proposed revisions are being submitted to bring the BOCA model code into conformity.

The proposed revisions do not in any manner reduce the substantive safety requirements imposed upon wireless cable antennas. proposed Sections 3109.4.3 and 3109.4.4 retain the restrictions currently found in Section 3109.2

and add restrictions found in Section 3109.3.2 that are currently applicable to satellite earth stations. Proposed Sections 3109.4.1.1 and 3109.4.1.2 restate the current provisions of existing Section 3109.1 as they apply to wireless cable antennas that do not require masts of more than twelve feet in length. Sections 3109.4.1.3 and 3109.4.1.4 are intended to obviate the delays, additional costs and administrative burdens of a case-by-case permit review process that might be imposed on other antenna installations, while ensuring compliance with the structural provisions of Sections 1608.0, 1609.0, 3108.3 and 3108.4.

Section 3109.4.1.3 reflects the same approach as existing Sections 3109.1 and 3109.3.1 - that there are certain antenna installations that are clearly so inconsequential that prior review by the local code official is unnecessary. The wireless cable antenna installations that would be permitted under proposed Section 3109.4.1.3 without a building permit impose a lesser load than antenna installations that are currently permitted without a permit pursuant to Sections 3109.1 and 3109.3.1. The Wireless Cable Association International, Inc. intends to submit calculations prior to the BOCA 1997 Spring Meeting that will demonstrate that, when subjected to design loads, wireless cable antennas of the type specified in proposed Section 3109.4.1.3 impose lower forces on the building than antennas that are currently exempt from the permit requirement under existing model code provisions.

To eliminate the delays, costs and administrative burdens associated with the case-by-case review entailed by the building permit process in cases not covered by Sections 3109.4.1.1, 3109.4.1.2 or 3109.4.1.3, proposed Section 3109.4.1.4 contemplates that the local code official may pre-approve pre-engineered antenna installation designs and procedures submitted by a wireless cable operator, and that wireless cable antennas could thereafter be erected without a permit so long as they comport with the pre-approved designs and procedures. Each wireless cable system pre-engineers and relatively limited number of installation designs and procedures that its installers employ, with the installation at any particular site being determined by the length of the antenna mast, the make and model of the particular antenna, and the most appropriate mounting mechanism given the type of roof and the available mounting locations. The vast majority of installation that would not be covered under Sections 3109.4.1.1, 3109.4.1.2 or 3109.4.1.3 employ one of these pre-engineered designs and procedures. Local pre-approval of the designs and procedures submitted by the wireless cable operator provides an opportunity for the local code official to ensure compliance with the structural provisions of Sections 1608.0, 1609.0, 3108.3 and 3108.4, while avoiding redundant and burdensome case-by case reviews.

**STAFF COMMENT:** The focus of the discussion regarding this proposal should be whether the new text would ensure that the existing building would not be damaged at the antenna support locations and that the antenna design and installations would properly account for the wind and snow loads required by the code.

Any calculation comparisons should be compared to the antennal structure and dish antenna size limitations of 12 feet above the roof and 2'-0" in diameter as currently stated in Sections 3109.1 and 3109.3.1.

BUILDING TECHNOLOGY INC  
1109 Spring Street  
Silver Spring MD 20910  
301/588-5020  
Telefax 301/587-5154



March 12, 1997

By Federal Express

Mr. Alan J. Pinkstaff, C.B.O.  
336 Aspen Village Drive  
Ballwin, MO 63021

Re: BOCA Building Code Development Committee  
Code Change No. B164-97

Dear Mr. Pinkstaff:

Enclosed please find an engineering report which provides technical documentation to support proposed Code Change No. B164-97, proposed by The Wireless Cable Association International, Inc. The report, prepared by Melvyn Green and Associates, a structural engineering firm, contains calculations of structural load of various antenna configurations.

The present BOCA National Building Code Sections 3109.1 and 3109.3.1 exempt from building permit requirements antennas up to two feet in diameter and up to 12 feet in height above the roof of a building. The calculations in the enclosed report compare the loads imposed by the currently exempted 2-foot solid dish antenna on a 12-foot mast with the loads imposed by open mesh wireless cable antennas on taller masts.

This code change was prompted by the federal Telecommunications Act of 1996 and new rules of the Federal Communications Commission. The timing of the new FCC rules did not permit more than preliminary calculations prior to submission of the initial proposed code changes in November. The complete, detailed calculations submitted herewith demonstrate that we could not support the mast height initially proposed. Therefore, we intend to submit a revision at the code change hearing that will reduce the mast height and add an area limitation in order to be consistent with the calculations. The revision to proposed Section 3109.4.1.3 will read as follows:

3. Any single or double finned tube antenna or any open mesh antenna (71% or more open in the surface of the antenna) of less than 3 feet and 4 inches (1,017 mm) in any projected dimension no more than 7 square feet (0.646 m<sup>2</sup>) in projected area erected and maintained by a wireless cable operator on a mast not more than 3036 feet (9,254.074 mm) in length.

Mr. Alan J. Pinkstaff  
March 12, 1997  
Page 2

Thus the revision reduces the allowable maximum height from 36 feet to 30 feet above the roof and limits area of the open mesh antenna to no more than 7 square feet.

We intend to bring to the code hearing sample wireless cable antennas, pictures of typical masts as visual aids, and antenna installation manuals used by the wireless cable industry.

We are consultants to the Wireless Cable Association, proponents of the referenced code change. If you have any questions or need for any further information, please do not hesitate to contact me.

Sincerely,

BUILDING TECHNOLOGY INC.

David B. Hattis  
President

Enclosure

cc w/encl: Paul E. Myers  
James T. Ryan  
Kenneth W. Andrews  
William D. Dupler  
Ronald E. Estepp  
Jeffrey K. Feid  
Wayne R. Jewell  
David L. Wismer

Robert McCluer, BOCA

Post-It® Fax Note 7671		Date	# of pages
To: David Hottis	From: Kelly		
Co./Dept.	Co. BOCA		
Phone #	Phone #		
Fax # 301-587-5154	Fax #		

**B160-97 D**

**Issues:** In support — buildings have been constructed using type NM and NMC electrical cable since 1975 without reported safety problems; the threshold for the use of NM and NMC cable needs to be in the code since it has not been revised in NFPA 70.

In opposition — the installation of sprinklers does not justify exceeding the limits for NM and NMC cable use in NFPA 70.

**Committee recommendation:** D based on the view that the limiting threshold for installation of type NM and NMC electrical cable is an item to be determined by the NFPA 70 development process.

**B161-97 AS**

**Committee recommendation:** AS based on the supporting statement.

**B162-97 D**

**Committee recommendation:** D based on the view that the code should not allow fire retardant treated wood to be used on walkways that connect high rise buildings. The walkways are already permitted to include fire retardant treated wood if they are considered part of a building in which fire retardant treated wood is acceptable for the building construction.

**B163-97 WP****B164-97 D**

**Issues:** In opposition — the failure of the antenna support would be a safety problem; the code should not include requirements over which a code official has no control; the antenna location requirements for set back from the property line should be the height of the antenna to prevent damage to adjacent property if the support fails; building departments should not be required to review plans and yet have no requirement for a building permit; without a building permit there is no notification for inspection of the installation, which is not appropriate; the antenna openings are subject to icing which would increase the wind area to be resisted; the submitted calculations assumed the use of guy wires but guy wires are not required by the proposal; the structural integrity could not be verified without field inspection.

**Committee recommendation:** D based on the opposing issues.

**B165-97 D**

**Issues:** In support — the requirements in the proposal should all be in one location such that they are user friendly rather than distributed to various sections of the building, mechanical and plumbing codes; the intent of the Figure 3111.2 note designated as "IMPORTANT" is that the code official is to determine where it is appropriate to impose the radon resistant construction requirements based on tests conducted in the home and information that is available from local EPA offices; only Use Group R-3 buildings are included in the proposed requirements since most of the field survey radon data is for that occupancy; it is much less expensive to install a passive system when the home is built than later when a radon problem is discovered. Field installation of a passive system during new construction is \$350.00 to \$500.00.

In opposition — the health hazard risk from radon exposure is not well known; the proposal would require all Use Group R-3 buildings in Zone 1 to meet the radon construction requirements yet it is not known if the occupants in all such buildings are exposed to a severe health hazard. Such buildings in other than Zone 1 would not be required to meet the radon construction requirements yet it is believed that some of these buildings could impose severe health hazards to the occupants. Thus the proposal would not have requirements that are consistent with the perceived risk; the proposal includes nonmandatory language that is not appropriate for the code; it is not logical that only Use Group R-3 buildings should be included in the proposal.

**Committee recommendation:** D based on the opposing issues.

**B166-97 D**

**Issues:** In opposition — the proposal would require code officials to continuously supervise the lead abatement work which is beyond the capability of most building department staff resources; the proposal includes requirements for code officials for maintenance work where a building permit would not be required, which is not appropriate; proposed Section 3307.4 is too restrictive. The section would require that a lead hazard be presumed to occur if the building was built prior to 1978; the proposal belongs in health department requirements and not the building code; it is not well known if the proposed procedures would abate the lead hazard or possibly create new lead hazard problems; code officials should not be required to supervise construction procedures; the proposal is a construction specification and not appropriate for the code.

**Committee recommendation:** D based on the opposing issues.

**B167-97 AS**

**Committee recommendation:** AS for consistency with committee action on related change B7-97.